abl3

Computer Bassline

**ABL3.1.0 UPDATE MANUAL**

Re
Rack Extension

New Features in ABL3.1.1

- Pattern Grid Edit mode
- Advanced Randomizer
- Integrated distortion unit with hipass control
- Minor sound engine improvements (less noise and aliasing, improved clarity)
- 23 Additional patches

Signal Chain

The signal chain of ABL3 has been changed such that the highpass filter and distortion effects are applied after the engine output:
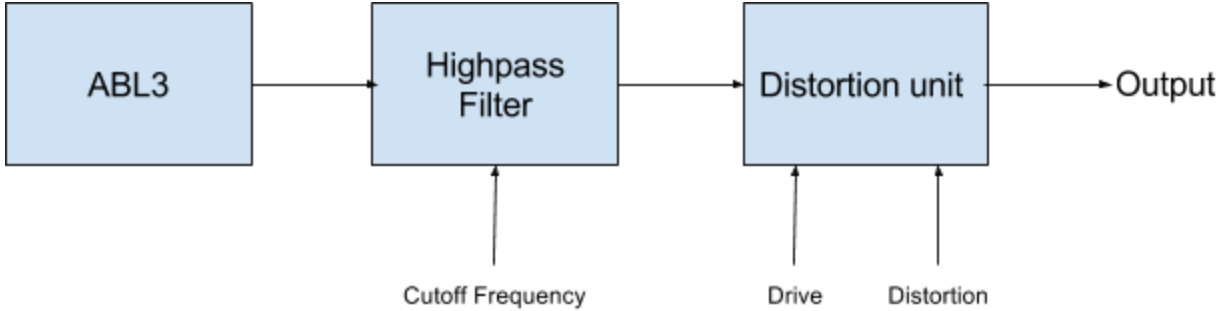
The distortion unit is an emulation of a transistor distortion circuit, which has the property of maintaining constant output power with different values of Drive.

Panel Overview

This document only addresses the changes from ABL3.0.0 (the first release version). Please see the full manual at: http://audiorealism.se/Downloads/ABL3-Operation-Manual.pdf

Mode Switch

The Mode Switch lets you select which view the Pattern section will display. There are three modes:

- Classic - This is the traditional way of entering 303 patterns, and is described in detail in the full operation manual
- Grid Edit - In Grid Edit mode up to 16 steps of a pattern can be edited at once
- Randomizer - The randomizer view provides a more flexible way to produce randomised patterns

When a pattern is changed in either of these modes the changes will be reflected in the other modes (as they operate on the same steps in the pattern).

Gate trim

The Gate trim knob from the back panel of ABL3 has been added to the front panel, and is now automatable and remotable. The gate trim affects the gate off portion of the VCA envelope. A lower setting will produce a longer release time of the gate. A higher setting produces a sharper gate.

Hipass knob

ABL3 now features sweepable 12dB/oct highpass filter. The cutoff is controlled by this knob. The frequency range is between 0Hz and 15284Hz. When the knob is full counter clockwise the highpass filter has no effect. **Note:** Since ABL3 is a model of the 303 there may still be some highpass effects caused by the main filter and oscillator algorithm.

Drive knob

Sets the amount of drive of the internal distortion unit. The drive knob will only have any effect if the Distortion amount is set to more than zero percent

Distort knob

The distortion knob sets the amount of distortion mixed in with the main signal. At 100% only the distorted signal is produced, while at 50% a mixture between the dry and wet (distorted) signal is generated.

Randomizer View

The Randomizer view offers an easy way to create interesting patterns. The parameters Scale, Octave, Note, Gate, Slide and Accent determine the scale and densities of each effect, and a pattern will be generated in the selected Root when apply is activated. The parameters can be adjusted in realtime to immediately hear the changes (with Apply activated).

- Scale - The user custom scale can be set here, along with which octaves (+1, -1) relative to the Root the pitches should be generated.
- Note - Sets the amount of diversity the pattern should have, when this is at 0% pitches at the Root will be generated, and at 100% all notes from the Scale are equally likely to be selected for each step.
- Gate - The density of the number of gates in the generated pattern.
- Slide - The density of the number of slide in the generated pattern.
- Accent - The density of the number of accents in the generated pattern.
- Root - Set the root note of the scale to be generated.
- Next - Seed Generate a new pattern based on the same settings.
- Prev - Seed Go back to the previous generated pattern.
- Fix - Scale When this button is activated the pitches will be selected from the scale in order instead of randomly, this can be useful for generating arpeggios or debugging a scale.
- Apply - Activates the pattern generator. When switching to another view other than the Random View the Apply button will be deactivated. This is because editing the pattern in another view would be overwritten constantly if the Apply was still activated.
- Run is a shortcut for playing the pattern if the Reason sequencer is not running
- Steps is the number of steps (1-64) to be randomized when Apply is activated

Grid Edit View

The Grid Edit view allows to display 16 steps of the pattern at once, making it easy to overview and edit the pattern.

The buttons on the left are Run, Clear and Number of Steps. The Pattern view is divided into a number of lanes: Step, Pitch, Gate, Down, Up, Accent and Slide. Each lane is divided into a number of cells. For pitch, these can be clicked and dragged up and down to change the pitch of a step. For the other lanes such as Gate a simple click will turn that cell on or off.

When editing patterns of lengths greater than 16 steps keep in mind that the Pattern selector will select which of the 16 in the full pattern (up to 64 steps) which will be display/edited. When editing subsections of a pattern this way remember to put the Pattern selector back to the original position, else the pattern may be shifted compared to the Reason sequencer transport.